

## Profiles of Electrical Engineers and Computer Scientists



**Madeline Vega (Electrical and Computer Engineer)  
Chief Systems Manufacturing Test Designer  
IBM Corporation**

### Job Description

Chief Systems Manufacturing Test Designer for System p and System z servers in the Global Server Integration & Test (GSI&T) organization, IBM Systems & Technology Group (STG).

### Education

B.S.E.E. - Electrical Engineering, University of Puerto Rico at Mayaguez

M.S.E. - Electrical and Computer Engineering, University of Texas

### Interview Segment

“My parents are retired high school teachers; my dad taught science and my mom English. It was their love for teaching and learning that instilled in me the understanding of how important it was to get a good education and to always do the best I could do.

I remember when I was a young kid every night before going to bed I would ask my dad a question about nature or how things worked, and he would explain things until I would fall asleep. Then by the time I was in the 5th grade I knew I was going to be an engineer, even though I wasn't completely sure what that meant. Both my parents would always encourage me to excel and to do more, so I did.

When I was in my junior year in high school I took the College Evaluation and Admissions Examination (equivalent to the SAT). I was recognized by The College Board and the Department of Education of Puerto Rico as one of the top 10 scores in the 1995 class. Then I participated in an engineering summer camp at the University of Puerto Rico where I

confirmed my passion for Electrical Engineering. My desire to succeed in this field directed me to take a first-year college Calculus course when I started my senior year in high school. Even though it was a 90-minute commute each way four days a week, my determination and discipline led me to complete the course with one of the highest grades of the class.

All the sacrifices paid off; after being nominated by the engineering summer camp program coordinator, I was awarded one of two Prizes/Scholarships by NACME and 3M to continue studies in Engineering. After completing the 5-year program, I graduated in 2001 from University of Puerto Rico at Mayaguez with a Bachelors of Science in Electrical Engineering. There, I took most of my courses in the area of Applied Electromagnetics and Communication Systems.

Besides achieving the highest GPA in my EE class, getting some undergraduate research experience, and working every summer in engineering internship positions, I was also involved in many extracurricular activities. These included serving on the board of directors of the IEEE, Tau Beta Pi and Golden Key student chapters.

Now I work for IBM in Austin, TX. For the past seven years I've worked in systems integration and test engineering for four generations of state-of-the-art servers. At the same time I completed my Masters of Science in Computer and Electrical Engineering from the University of Texas at Austin. Through the work I've done at IBM I'm also a co-inventor in several patents issued in the U.S. To give back to the community I serve in the Board of Directors of the YWCA Greater Austin, which provides counseling services for women and their families, and volunteer mentoring students. One of my goals as a Hispanic Woman in Engineering to further increase my technical and business knowledge, and continue contributing to the development of new systems that will improve the way of life of current and future generations. Another is to help and encourage girls and other young women see the good opportunities in Engineering and Science fields. And for all of this I thank my parents for their constant encouragement and getting me hooked on Science and Engineering!"

Profiles of engineers are considered snapshots of a point in the individual's career.



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